Abstract

Based on the social comparison theory, this research examined how self-referent and other-referent career successes predict career satisfaction and turnover intention among a sample of Chinese employees (N = 299). It was found that both self-referent and other-referent career successes played unique roles in predicting career satisfaction, which, in turn, predicted turnover intention. In addition, this research examined the role of achievement motivation in this process and revealed a moderated mediation model for the relations among these variables. Specifically, the indirect effect of self-referent career success on turnover intention through career satisfaction was stronger among employees with a higher level of individual-orientated achievement motivation, and the indirect effect of other-referent career success on turnover intention through career satisfaction was stronger among employees with a lower level of individual-orientated achievement motivation. These findings carry implications for research on career success and turnover intention.

Keywords: self-referent career success, other-referent career success, individual-orientated achievement motivation, social-orientated achievement motivation

Self-referent and Other-referent Career Successes, Career Satisfaction and Turnover Intention among Chinese Employees: The Role of Achievement Motivation

Currently, the careers of employees have become less bounded within specific organizations (Arthur, 1994), and employees' subjective career evaluations (e.g., career satisfaction) have become more important in predicting their turnover intentions (e.g., Guan et al., 2014; Weng & McElroy, 2012). Therefore, identifying the manner in which employees subjectively assess their career success will carry great implications for research on career success and job mobility (Direnzo & Greenhaus, 2011). In most previous research, career success was measured by the progress that one has achieved towards his or her personal goals because personal career goals reflect one's preferences and values (e.g., Boudreau, Boswell & Judge, 2001; Greenhaus, Parasuraman, & Wormley, 1990; Seibert & Kraimer, 2001). However, from a social comparison perspective (Festinger, 1954), individuals are also motivated to evaluate themselves by comparing the outcomes that they have achieved to those achieved by other people. Similarly, individuals' subjective career success depends not only on the self-referent criteria set by themselves but also on the other-referent criteria, which refer to the status of one's career success relative to those of others (Heslin, 2003, 2005; Lawrence, 1984; Turban & Dougherty, 1994). For example, in a study among MBA students, Heslin (2003) found that 89% used self-referent criteria and that 68% adopted other-referent criteria to evaluate their career success. Moreover, it was found that other-referent success explained unique variance in the perceptions of overall career success (Heslin, 2003).

This research's objective is to contribute to this stream of research through the following means. First, based on a multi-facet framework of career success (Nicholson & De

Waal-Andrews, 2005), we examined the predictive validity of self-referent and other-referent career successes in predicting career satisfaction among Chinese employees. In addition, we tested a mediation model in which both self-referent and other-referent career successes predict Chinese employees' turnover intention through the mediation of career satisfaction. Moreover, based on the model of self-construal and individual/social-orientated achievement motivation (Markus & Kitayama, 1991; Yu & Yang, 1994), we examined the boundary conditions of the above mediation model by testing the moderation role of achievement motivation. Thus, this research reveals the dynamic process through which different types of career successes affect employees' career- and work-related outcomes.

Self-referent and Other-referent Career Successes, Career Satisfaction and Turnover Intention

When individuals evaluate their career success, they often rely on self-referent criteria that reflect their personal standards and preferences (e.g., Greenhaus et al., 1990). However, the social comparison theory (Festinger, 1954) states that individuals often compare their own actions and outcomes with others to ensure the accuracy of self-evaluations, particularly when no objective information is available. In addition to the function of self-evaluation, researchers proposed that social comparison could fulfill the need for self-enhancement and self-improvement (Wood, 1989). Social comparison can be categorized into downward and upward comparisons. Because downward comparison reflects a relative higher status in achieving career success, it often leads to positive self-evaluations and makes individuals feel better about themselves (e.g., Wills, 1981). Conversely, upward comparisons often make individuals feel worse because they reflect a relatively lower status compared with others'

career success; at the same time, upward comparison could also motivate individuals to exert more effort on self-improvement (e.g., Collins, 1996).

In contrast to the vibrant research on social comparison processes in social and organizational behavior (e.g., Buunk & Gibbons, 2007), few studies have elucidated the role of other-referent criteria in research on career success (Heslin, 2003, 2005; Lawrence, 1984; Turban & Dougherty, 1994). To overcome the limitations of previous measures on other-referent career success (e.g., limited breadth of the criteria and inadequate number of items), Heslin (2003) adopted the framework developed by Greenhaus et al. (1990) and developed a scale of other-referent career success based on the following aspects: overall success, income, career advancement, skill development, autonomy and intellectual stimulation. Participants' other-referent career success was rated based on the comparison with their career peers on the above aspects. Heslin (2003) found that individuals consider other-referent criteria in addition to self-referent criteria in the subjective evaluations of their career success and noted that other-referent success explained 12% of the unique variance in the perceptions of overall career success.

Due to the multi-dimensional nature of career success, in this research, we adopted a more comprehensive measure of career success based on the framework proposed by Nicholson and De Waal-Andrews (2005). Based on a comprehensive literature review, Nicholson and De Waal-Andrews (2005) outlined six categories of career success: status and rank (hierarchical position); material success (wealth, property, and earning capacity); social reputation and regard, prestige, and influence; knowledge and skills; friendships and network connections; and health and well-being. These six aspects were proposed as the key objective

indicators of career success due to their utilities in yielding fitness advantages. Because this framework reflects the important components of career success that are included in previous measures (e.g., income, career advancement, skill development, and intellectual stimulation) and captures several new elements (e.g., reputation and network connections), in this research, we adopted this framework to measure self-referent and other-referent career successes.

From a social comparison perspective, we propose that self-referent and other-referent career successes will have positive effects on employees' overall career satisfaction. Based on the research findings on the important role of career satisfaction in predicting turnover intention, we propose that when employees have a lower level of career satisfaction, they are more likely to quit their current jobs for other opportunities (Arthur, Khapova, & Wilderom, 2005; Hall, 2002; Hall & Chandler, 2005). Therefore, we propose that career satisfaction will serve as the key explanatory link between the types of career successes and employees' turnover intention.

> *Hypothesis 1:* Employees' self-referent career success (H1a) and other-referent career success (H1b) will be negatively related to their turnover intention, with these relations mediated by career satisfaction.

The Role of Individual-orientated and Social-orientated Achievement Motivation

Achievement motivation refers to the tendency to strive towards goals that are evaluated in terms of standards of excellence (McClelland, Atkinson, Clark, & Lowell, 1953). From the perspective of the self-construal model (Markus & Kitayama, 1991), individuals develop both independent (the view that one's self is unique and distinctive from others) and interdependent (the view that one's self is embedded in group membership and in

relationships with others) self-construals through their life experiences. These two aspects of self-construals coexist and serve as important guidance for individuals' life goals (Markus & Kitayama, 1991; Singelis, 1994). On the one hand, each person has his/her unique preferences and characteristics, which will lead to self-directed goal settings and outcome evaluations. This individual-oriented achievement motivation (IOAM) reflects one's independent self-construal (Markus & Kitayama, 1991) because it represents a "dynamic tendency to strive toward an internally determined goal in a personally chosen way" (Yang, 1999, p. 202). On the other hand, an individual's interdependent self-view can also motivate him/her to develop a social-orientated achievement motivation (SOAM), which refers to the tendency to define one's achievement based on the expectations and standards of significant others (Markus & Kitayama, 1991; Yu & Yang, 1994).

Similar to the self-construal model, IOAM and SOAM are considered two separate but parallel dimensions, and both IOAM and SOAM were found to be driving forces for individuals' learning behavior and positive learning outcomes (Cheung & Arnold, 2010). In this research, we argue that individual-orientated and social-orientated achievement motivation may serve as important moderators for the relations between self-referent and other-referent career successes and outcomes. Because self-referent career success is highly relevant to employees' personal standards and preferences, for employees with a high level of IOAM, self-referent career success enables them to achieve personal distinctiveness and uniqueness. Therefore, it is likely that among employees with a higher IOAM, self-referent career success may serve as a stronger predictor for career satisfaction. In supporting this argument, previous research has revealed that for Chinese employees with a higher level of

independent self-construal, the perceived complementary fit (whether they can play unique roles in their organizations) serves as a stronger predictor for their organizational commitment and citizenship behavior compared with those who have a lower level of independent self-construal (Guan, Deng, Risavy, Bond, & Li, 2011). However, for employees with higher SOAM, achieving personal uniqueness from others is not an important goal for them; thus, the relation between self-referent career success and career satisfaction should be weaker for them. Based on the above, the following is hypothesized:

> *Hypothesis 2:* IOAM and SOAM will moderate the relation between self-referent career success and career satisfaction such that self-referent career success will be more strongly related to career satisfaction among people with a higher level of IOAM (H2a) or a lower level of SOAM (H2b).

At the same time, because other-referent career success reflects the extent to which employees use social standards to evaluate their career success, the effects of this type of career success on career satisfaction may be stronger among employees with a higher level of SOAM but weaker among employees who have a higher level of IOAM.

> *Hypothesis 3:* SOAM and IOAM will moderate the relation between other-referent career success and career satisfaction such that other-referent career success will be more strongly related to career satisfaction among people with a higher level of SOAM (H3a) or a lower level of IOAM (H3b).

The above discussion also suggests that both IOAM and SOAM may moderate the indirect effect of career success on the turnover intention through career satisfaction. Thus, we examined the moderated mediation models for the relations among these variables, as

shown in Figure 1.

Insert Figure 1 here

Method

Participants and Procedure

Data were collected from 250 students who enrolled in a career development course at a university in Beijing, China. As a course project, each student was required to meet at least one full-time employee to conduct an interview on the manager's career development. This research questionnaire was completed during the interview. Interviewees signed a consent form before they began the questionnaire, and their email address was recorded. After the data collection, an enquiry email was sent to all of the employees who were interviewed to confirm that they completed the questionnaire themselves. Data collection began in February 2013 and ended in June 2013.

Through the above procedure, the sample consisted of 299 full-time Chinese employees (168 males and 131 females) from various organizations. The participants consisted of 9 age groups: 14.7% were 21 – 25 years old, 21.4% were 26 – 30 years old, 11.4% were 31 – 35 years old, 7% were 36 – 40 years old, 22.7% were 41 – 45 years old, 18.1% were 46 – 50 years old, 3.3% were 51-55 years old, 1.3% were 56 -60 years old, and 0.3% were 61 years old or above. In terms of educational background: 0.7% had primary education, 2.7% had a junior high school education, 4.3% had a senior high school education, 18.4% had associate degrees, 50.2% had Bachelor's degrees, 18.1% had Master's degrees, and 5.7% had Doctor's degrees. Participants worked in different industries, including manufacturing, construction or transportation (19.1%), high technology (5.4%), finance or

property sector (8.7%), education or research (26.2%), retail (9.4%), government or public service (20.5%), and other industry (11.7%). Participants' organizations' sizes were distributed as follows: 27.9% of the organizations that participants worked for had 100 employees or fewer, 30.3% had 100 to 500 employees, 10.5% had 501 to 1,000 employees, and 31.3% had 1,001 employees or more. Participants' job positions included management (43.5%), marketing (9.7%), internal service (15%), teaching or training (15.7%), technical (7%), production (3.3%) and other positions (5.7%).

Instruments

The Self-referent Career Success and Other-referent Career Success Scale. Based on the framework proposed by Nicholson and De Waal-Andrews (2005), we measured participants' career success based on the following six aspects: status and rank (hierarchical position); material success (wealth, property, and earning capacity); social reputation, regard, prestige, and influence; knowledge and skills; friendships and network connections; and health and well-being. For the self-referent measure, we asked participants to rate their career progress towards their personal goals on a 5-point Likert scale ("1" = "*far below my personal criteria*", "5" = "*far above my personal criteria*"). For the other-referent measure, we asked participants to compare their career success in the six aspects with their career peers in their occupations and to rate themselves on a 5-point Likert scale ("1" = "*far below the average level*", "5" = "*far above the average level*"). We calculated the α coefficient for the 6 items for self-referent career success and the 6 items for other-referent career success as a test of internal consistency, with a result of .78 and .77, respectively.

The Individual-orientated and Social-orientated Achievement Motivation Scale. This

scale was adopted from the study by Cheung and Arnold (2010), with 9 items (α = .65) that measure individuals' tendency to strive toward an internally determined goal (a sample item was: "My life goals and values are determined by myself. ") and 9 items (α = .82) that measure the tendency to define one's achievement based on the expectations of significant others (a sample item was: "I try hard to accomplish the expectation of my parents, to avoid letting them down."). Participants in this study were requested to rate their responses on a 5-point Likert scale ("1" = "*strongly disagree"*, "5" = "*strongly agree*"). Cheung and Arnold (2010) showed that that this scale was a reliable measure for the two types of achievement motivation in the Chinese context. In addition, the predictive validity of this scale was supported by the positive effects of these two types of achievement motivation on individuals' career exploration (Cheung & Arnold, 2010). In this study, we calculated α coefficients for the individual-orientated and social-orientated achievement motivation subscales, with a result of .85 and .87, respectively.

The Career Satisfaction Scale. Participants' were asked to evaluate the overall satisfaction with their careers on a short-form scale that was used in previous research (Guan et al., 2013), with two items (α = .88) to measure the overall career satisfaction: "I am satisfied with the success achieved in my career" and "I am satisfied with the progress I have made to meet career objectives." The validity of this scale in the Chinese context was supported by its positive relations with Chinese employees' salary and managerial level as well as career self-efficacy (Guan et al., 2013). The responses were rated on a 5-point Likert-type scale ("1" = "*strongly disagree*", "5" = "*strongly agree*"). In this study, the α coefficient of these two items was .83.

The Turnover Intention Scale. Participants were asked to rate their intention to leave their current organizations on the three-item scale that was developed by Cammann, Fichman, Jenkins and Klesh (1979). A sample item was "I always think about leaving this organization." The Chinese version of this scale has been used in previous studies and showed good reliability (e.g., Guan et al., 2014; Guan, Zhou, Ye, Jiang, & Zhou, 2015). The validity of this scale was supported by its negative relation to career satisfaction (Guan et al., 2014; Guan et al., 2015). The responses were rated on a 5-point Likert scale ("1" = "*strongly disagree*", "5" = "*strongly agree*"). The α coefficient of these 3 items in this study was .79.

Control Variables. To eliminate the potential confounding effects of demographic background (Becker, 2005), we incorporated these variables as controlling variables into our model: gender (dummy coded, "male" as reference group) and education level ("1" = "primary education", "2" = "junior high school education", "3" = "senior high school", "4" = associate degree", "5" = "Bachelor's degree", "6" = "Master's degree", and "7" = "Doctor's degree"). The age of the participants was measured by a 9-point scale with an interval of 5 years (e.g., "1" = "25 years old or below", "2" = "26 to 30 years old", "3" = "31 to 35 years old", and "9" = "61 years old or above"). Because organizational size has been believed to be related to indicators of career success (Brown & Medoff, 1989), we also measured and controlled the effect of organizational size. Organizational size was measured on a 4-point scale ("1"= "100 employees or less", "2" = "101–500 employees", "3" = "501–1000 employees", and "4" = "1001 employees or more"). In addition, we measured and controlled industry (dummy coded, "manufacturing, construction or transportation" as the reference group) and participants' job positions (dummy coded, "management" as the reference group).

Results

Confirmatory Factor Analysis

To examine whether the items that measure self-referent and other-referent career successes can be categorized into two dimensions and whether these items were distinguishable from items that measure career satisfaction and turnover intention, we conducted a confirmatory factor analyses (CFA) to test the factor structure underlying these items. First, the four-factor model was tested, and the correlations among the four factors were freely estimated. The results of the CFA showed that all of the factor loadings were significant (*ps* < .05), and the goodness-of-fit indexes indicated that the proposed model fit the data, χ^2 = 311.47, *df* = 113, χ^2 */df* = 2.76, *CFI* = .89, *IFI* = .89, *RMSEA* = .08. An additional CFA was then conducted by combining items under self-referent and other-referent career success as one factor (χ^2 = 535.90, *df* = 116, *CFI* = .77, *IFI* = .77, *RMSEA* = .11), combining the items under self-referent career success and career satisfaction into one factor (χ^2 = 451.58, *df* = 116, *CFI* = .82, *CFI* = .82, *RMSEA* = .10) and combining the items under other-referent career success and career satisfaction into another factor (χ^2 = 509.38, *df* = 116, *CFI* = .78, *CFI* = .78, *RMSEA* = .11). The fit indexes showed that the four-factor model fit the data significantly better than the above three-factor models did ($\Delta\chi^2$ >= 140.11, *df* = 3, *p*s < .001). Therefore, these four constructs could be treated as independent variables for further analyses.

Descriptive and Correlations

The descriptive statistics and correlations among controlling variables, self-referent career success, other-referent career success, career satisfaction, turnover intention, IOAM

and SOAM are shown in Table 1. The results showed that career satisfaction was positively related to self-referent career success, r (299) = .48, $p < .001$, and other-referent career success, r (299) = .40, $p < .001$. Turnover intention was negatively related to self-referent career success, r (299) = -.23, $p < .001$, other-referent career success, r (299) = -.24, $p < .001$, and career satisfaction, r (299) = -.33, $p < .001$. IOAM was positively related to self-referent career success, r (299) = .12, $p < .05$, other-referent career success, r (299) = .36, $p < .001$, and career satisfaction, r (299) = .33, $p < .001$. SOAM was positively related to other-referent career success, r (299) = .14, $p < .05$.

Insert Table 1 here

Examining the Mediation Models

We used the three-step procedure proposed by Preacher and Hayes (2008) to test the mediation role of career satisfaction on the relations between the types of career successes and turnover intention. All continuous predictors were centered before the analysis (Aiken & West, 1991). The first step was to examine the relations between the two predictors and the mediator. The result showed that after controlling for the effects of gender, age, education, organizational size, industry and occupation, both self-referent (β = .46, t = 6.12, $p < .001$) and other-referent (β = .26, t = 3.13, $p < .01$) career successes served as significant predictors of career satisfaction. Second, after controlling for the effects of demographics and the two types of career successes, career satisfaction had a significant effect on turnover intention (β= -.27, t = -3.50, $p < .001$). By using the bootstrapping method for further calculation, we found a significant indirect effect of other-referent career success on turnover intention through the mediation of career satisfaction (95% CI = [-.27, -.06]). Similarly, the

indirect effect of self-referent career success on turnover intentions through career satisfaction was also significant (95% CI = [-.31, -.07]). These results supported Hypotheses H1a and H1b.

Testing the Moderated-mediation Model

To examine the moderation and moderated-mediation effects, we adopted the procedure developed by Preacher, Rucker and Hayes (2007). In this two-equation procedure, one equation is for the "mediator model" (career satisfaction as dependent variable), and the other is for the "dependent variable model" (turnover intention as dependent variable). To support the simple moderation hypotheses (H2a, H2b, H3a, H3b), the coefficients of the interaction terms in the mediator models should be significant. To support the moderated-mediation models, the indirect effects should vary with different levels of moderators. The result showed that after controlling for the effects of gender, age, education, organizational size, industry and occupation, there was an interaction between other-referent career success and IOAM on career satisfaction (B = -.43, SE = .14, t = -3.08, p < .01). In addition, the interaction effect between self-referent career success and IOAM on career satisfaction was also significant (B =.26, SE = .12, t = 2.11, p < .05), which supported H2a and H3b. However, hypotheses H2b and H3a were not supported because both the interaction between other-referent career success and SOAM on career satisfaction (B = -.01, SE = .06, t = -.21, *ns*) and the interaction between self-referent career success and SOAM (B = .07, SE = .13, t = .50, *ns*) were non-significant (see Table 2).

Insert Table 2 here

To illustrate the interactions effects clearly, the two interactions were plotted at one

standard deviation below and above the mean of IOAM. As shown in Figure 2, when IOAM was lower, the relation between other-referent career success and career satisfaction was significant, $B = .40$, $SE = .12$, $t = 3.24$, $p < .01$. When IOAM was higher, the relation between other-referent career success and career satisfaction was not significant, $B = -.04$, $SE = .11$, $t = -.44$, ns. As shown in Figure 3, when IOAM was lower, the relation between self-referent career success and career satisfaction was significant, $B = .31$, $SE = .09$, $t = 3.34$, $p < .001$. When IOAM was higher, the relation between self-referent career success and career satisfaction was also significant and stronger, $B = .58$, $SE = .10$, $t = 6.01$, $p < .001$.

Insert Figure 2 and Figure 3 here

To further calculate the moderated-mediation effects of IOAM, we conducted bootstrapping analyses. The results indicated that the indirect effect of other-referent career success on turnover intention (95% CI = [-.25, -.03]) was higher at a lower level of IOAM than the indirect effect (95% CI = [-.04, .09]) at a higher level of IOAM. On the other hand, the indirect effect of self-referent career success on turnover intention (95% CI = [-.20, -.02]) was smaller at a lower level of IOAM (one *SD* below the mean) than the indirect effect (95% CI = [-.32, -.06]) at a higher level of IOAM.

Discussion

This research tested how self-referent and other-referent career successes predicted career satisfaction and turnover intention among a sample of Chinese employees. The results showed that both self-referent and other-referent career successes played unique roles in predicting overall career satisfaction, which, in turn, predicted turnover intention. In addition, this research revealed a moderated mediation model for the relations among these variables

such that the indirect effect of self-referent career success on the turnover intention through career satisfaction was stronger among employees with a higher level of individual-orientated achievement motivation and the indirect effect of other-referent career success on the turnover intention was only significant among employees with a lower level of individual-orientated achievement motivation. These findings carry implications for research on career success and turnover intention.

Theoretical Implications

Based on the social comparison theory (Festinger, 1954), Heslin (2003) found that individuals consider both self-referent and other-referent criteria in subjective evaluations of their career success. This research further used a more comprehensive measure of self-referent and other-referent career successes and examined their relations with career satisfaction and turnover intention. The two-factor structure supported the distinctiveness of these two types of career successes (Heslin, 2003, 2005; Lawrence, 1984; Turban & Dougherty, 1994). In addition, the results also showed that other-referent career success had unique contributions in predicting career satisfaction, above and beyond the effect of control variables and self-referent career success. These results enrich current theories of career success by showing that other-referent career criteria provide an important angle for individuals to evaluate their career success (Arthur et al., 2005; Heslin, 2005). Future research should incorporate the social comparison perspective to improve our understanding of how career success affects individuals' subjective career evaluations and well-being. In addition, future research should corroborate these findings by adopting alternative measures of career success. For example, researchers may consider assessing participants' perceptions

of career attainments separately from the standards and using polynomial regression to assess their career success (Edwards, 2008). In addition, the two-item measure of career satisfaction may not fully capture the comprehensive meaning of this construct, and future research should adopt a better measure (Greenhaus et al., 1990).

In addition, this research revealed that career satisfaction serves as an important mediator between the two types of career successes and turnover intention. These findings not only provide further support on the important role of career satisfaction in connecting distal predictors and employees' turnover intention (Direnzo, & Greenhaus, 2011) but also showed that other-referent career success had an impact on employees' turnover intention. Therefore, future research should continue to examine the incremental value of the social comparison perspective in predicting other important organizational outcomes, such as organization commitment and job satisfaction.

In addition to the main effects discussed above, this research revealed that IOAM serves as an important moderator on the relations between career success and outcome variables. Consistent with the self-construal model (Markus & Kitayama, 1991), because self-referent career success leads to the perception of personal achievement and distinctiveness, employees with a higher level of IOAM tend to accord greater weight to their self-referent attainments in their subjective career evaluations (Guan et al., 2011). Conversely, other-referent career success contributes to the perception of having a relatively higher status in social relationships. Individuals with a higher IOAM may not consider this social comparison process to be relevant to their self-concepts; therefore, the effects of other-referent career success may not be significant.

These moderation effects advance career success theory by analyzing and highlighting the underlying motives that drive employees' evaluations of different aspects of career success. As proposed by Markus and Kitayama (1991), people in different cultures are socialized to form different types of self-construals and motivation; therefore, future research may continue to examine whether culture also moderates the relations between different types of career successes and overall career satisfaction. Because employees from Western cultures (e.g., America and Western Europe) tend to view themselves as more independent, emphasizing their self-referent success may make them more likely to form positive career evaluations. Conversely, employees in Eastern cultures (e.g., Chinese, Japanese) tend to view themselves as less independent; thus, emphasizing their relative career success to their peers may make them more satisfied with their careers. A systematic cross-cultural investigation of these possibilities will be an important question to address in future research efforts (Guan et al., 2011; Guan et al., 2015; Willner, Gati, & Guan, 2015).

It is also worth noting that the moderation role of SOAM was not supported in this research. Because the measure of SOAM mainly captures individuals' consideration of significant others, such as their parents and friends, in their achievement goals, but not those of other people in general, the other-referent comparison with the peers in their occupations may not be emphasized by individuals with a higher level of SOAM (Markus & Kitayama, 1991; Yu & Yang, 1994). Therefore, the non-significant moderation effect of SOAM on the relation between other-referent career success and career satisfaction may be due to the mismatch of reference groups. It is also possible that individuals with higher SOAM may be socialized by significant others not to compare their own career achievements with those of

their peers. Moreover, individuals with a higher level of SOAM may internalize the expectations of significant others into their personal career goals (Markus & Kitayama, 1991). Individuals' personal goals may reflect both their own preferences and the preferences of significant others (Guan et al., 2015); therefore, the moderation role of SOAM may not be significant. These results highlight the importance of delineating how individuals with a higher level of SOAM integrate the preferences of significant others into their personal career goals. These important questions remain to be examined in future research.

Practical Implications

For career educators and counselors, the findings of this research provide a social comparison perspective to understand individuals' subjective career success. It will be important to highlight individuals' self-referent and other-referent career successes to promote their career satisfaction. At the same time, because individuals with higher IOAM tend to focus more on self-referent rather than other-referent success, it is important to carefully assess their personal goals and provide guidance on how to achieve these goals. For organizations, because employee turnover often results in extra financial costs, disrupted operations, decreased quality of customer service, and other negative organizational consequences, it is important to understand how different types of career successes affect employee career satisfaction and turnover intention and the conditions under which these effects will be more prevalent. As suggested by the findings of this study, organizations should use more self-referent success to motivate employees with higher IOAM. Specifically, it is important to assess these employees' personal career goals and to attempt to match their preferences with appropriate career opportunities (Guan et al, 2014). Conversely, it is also

important to highlight the "relative success" of employees with lower IOAM by using downward comparison tactics to promote their career satisfaction and reduce their turnover intention. In sum, this study highlights the importance of designing appropriate strategies to motivate and retain employees with different types of achievement motivation.

Possible Limitations and Future Research Directions

Despite the promising results of this paper, there are possible limitations associated with this research. First, due to participants rating themselves in the same measurement context, the common method variance may be artificially influencing these findings (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). Although this study relied on self-reports from participants regarding the focal study variables, possible common method variance issues were circumvented by instructing participants to answer each question independent of the other questions and to answer all of the questions honestly; in addition, participants were informed that their responses would be anonymous. Furthermore, the major findings of this study are moderated mediation effects, and these effects are considerably less influenced by common method bias (Evans, 1985). Nevertheless, future research should seek to corroborate the findings of this study by using multiple reports, methods, and time periods. As an additional limitation of this research, the results were correlational in nature and, thus, could not reveal causal relations. The relations revealed in this study may be reciprocal, and it is highly possible that career satisfaction can serve as the cause of different choices of referent standards (Heslin, 2005). Future research should also address this possible limitation by corroborating these findings using experimental or longitudinal study designs.

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Table1 *Descriptive Statistics, Reliability Coefficients, and Inter-Correlations among Variables*

	Mean	*SD*	1	2	3	4	5	6	7	8	9
1. (Gender) Female	NA	NA	**NA**								
2. Age Group	3.76	1.94	-.10	**NA**							
3. Education	4.92	1.05	.02	-.02	**NA**						
4. (Industry) High-tech	**NA**	**NA**	-.18**	-.002	.06	**NA**					
5. Finance & Property	**NA**	**NA**	.04	-.12*	.12*	-.07	**NA**				
6. Education	**NA**	**NA**	.15**	.03	.29***	-.14*	-.18***	**NA**			
7. Food & retail	**NA**	**NA**	-.12*	-.01	-.14*	-.08	-.10	-.19***	**NA**		
8. Government	**NA**	**NA**	.06	.11	-.01	-.12*	-.16**	-.30***	-.16**	**NA**	
9. Other industry	**NA**	**NA**	.06	-.12*	-.09	-.09	-.11	-.22***	-.12*	-.18***	**NA**
10. (Occupation) Marketing	**NA**	**NA**	-.13*	-.19**	-.22***	.02	-.06	-.14*	.17**	-.08	.16**
11. Teaching/ Training	**NA**	**NA**	.08	.14*	.30***	-.10	-.13*	.69***	-.14*	-.17**	-.16**
12. Technical	**NA**	**NA**	-.01	-.17**	.06	.40***	.06	-.07	-.09	-.11	-.02
13. Production	**NA**	**NA**	.10	-.05	-.30***	-.04	-.06	-.07	.004	-.002	-.07
14. Services	**NA**	**NA**	.08	-.18**	-.08	-.02	.17**	-.17**	.03	-.004	.14*
15. Other occupation	**NA**	**NA**	.07	-.07	-.01	-.06	-.08	.08	.02	-.02	.05
16. Organizational size	2.45	1.20	-.02	-.02	.26***	.06	.07	.01	-.09	-.07	-.03
17. Self -referent Career success	2.81	.56	.001	.27***	.02	.04	.06	-.02	-.12*	.01	.04
18. Other -referent Career success	3.21	.50	-.06	.13*	.13*	-.04	.03	-.01	-.08	.04	.06
19. Career Satisfaction	3.57	.70	-.02	.22***	.14*	-.03	-.03	.11	-.03	.01	-.001
20. Turnover Intention	2.34	.82	.03	-.25***	-.09	.06	-.06	-.02	-.02	-.03	.03
21. IOAM	3.63	.52	-.01	.00	.17**	-.001	-.06	.11*	-.02	-.10	.13*
22. SOAM	3.08	.65	-.17**	-.02	-.08	.06	-.11	-.05	.06	.04	-.01

Note. *$p < .05$. **$p < .01$. ***$p < .001$. Reliability coefficients appear on the diagonal in bold.

IOAM: individual-orientated achievement motivation. SOAM: social-orientated achievement motivation.

Table1 (cont.) *Descriptive Statistics, Reliability Coefficients, and Inter-Correlations among Variables*

	10	11	12	13	14	15	16	17	18	19	20	21	22
1. Gender													
2. Age													
3. Education													
4. (Industry) High-tech													
5. Finance & Property													
6. Education													
7. Food & retail													
8. Government													
9. Other industry													
10. (Occupation) Marketing	**NA**												
11. Teaching/ Training	-.14*	**NA**											
12. Technical	-.09	-.12*	**NA**										
13. Production	-.06	-.08	-.05	**NA**									
14. Services	-.14*	-.18**	-.12*	-.08	**NA**								
15. Other occupation	-.08	-.11	-.07	-.05	-.10	**NA**							
16. Organizational size	-.14*	.03	.01	.04	-.11	-.07	**NA**						
17. Self -referent Career success	-.05	-.08	-.05	-.10	-.06	.04	.05	**.78**					
18. Other -referent Career success	-.03	.01	-.12*	-.11	-.10	.01	.04	.49***	**.77**				
19. Career Satisfaction	-.16**	.09	-.14*	-.09	-.13*	.08	.11	.48***	.40***	**.83**			
20. Turnover Intention	.10	-.07	.16**	.06	-.02	.04	.01	-.23***	-.24***	-.33***	**.79**		
21. IOAM	-.01	.10	-.13*	-.07	-.08	-.02	.08	.12*	.36***	.33***	-.10	**.75**	
22. SOAM	.09	-.04	-.01	-.05	.05	.02	.03	.08	.14*	.06	.02	.12*	**.85**

Note. *$p < .05$. **$p < .01$. ***$p < .001$. Reliability coefficients appear on the diagonal in bold.

Table 2

Moderation and Moderated Mediation Effects for IOAM and SOAM

Mediator variable model with career satisfaction as dependent variable				
Variable	*B*	*S.E.*	*t*	*P*
Constant	3.54	.13	27.88	< .001
Self-referent Career success	.44	.07	5.88	< .001
Other-referent Career success	.18	.09	1.96	< .1
IOAM	.29	.07	4.02	< .001
SOAM	-.05	.11	-.46	*Ns*
IOAM×Self-referent	.26	.12	2.11	< .05
IOAM×Other-referent	-.43	.14	-3.08	< .01
SOAM×Self-referent	.07	.13	.50	*Ns*
SOAM×Other-referent	-.01	.06	-.21	*Ns*
Dependent variable model with turnover intention as dependent variable				
Variable	*B*	*S.E.*	*t*	*P*
Constant	3.30	.33	10.10	< .001
Self-referent Career success	-.05	.10	-.47	*Ns*
Other-referent Career success	-.17	.11	-1.51	*Ns*
IOAM×Other-referent	-.05	.15	-.33	*Ns*
SOAM×Other-referent	.06	.07	.79	*Ns*
Career Satisfaction	-.28	.08	-3.52	< .001

Conditional indirect effect as a function of IOAM								
	Self-referent Career success				Other-referent Career success			
Value of IOAM	*Indirect Effect*	Boot SE	Boot LLCI	Boot ULCI	*Indirect Effect*	Boot SE	Boot LLCI	Boot ULCI
-1 *SD*（-0.52）	-.08	.05	-.20	-.02	-.11	.06	-.25	-.03
+1 *SD*（0.52）	-.16	.07	-.32	-.06	.02	.03	-.04	.09

Note. IOAM: individual-orientated achievement motivation. SOAM: social-orientated achievement motivation. These results were calculated after controlling for the effects of participants' gender, age, education, industry, position and organizational size.

Figure 1. The proposed moderated-mediation model

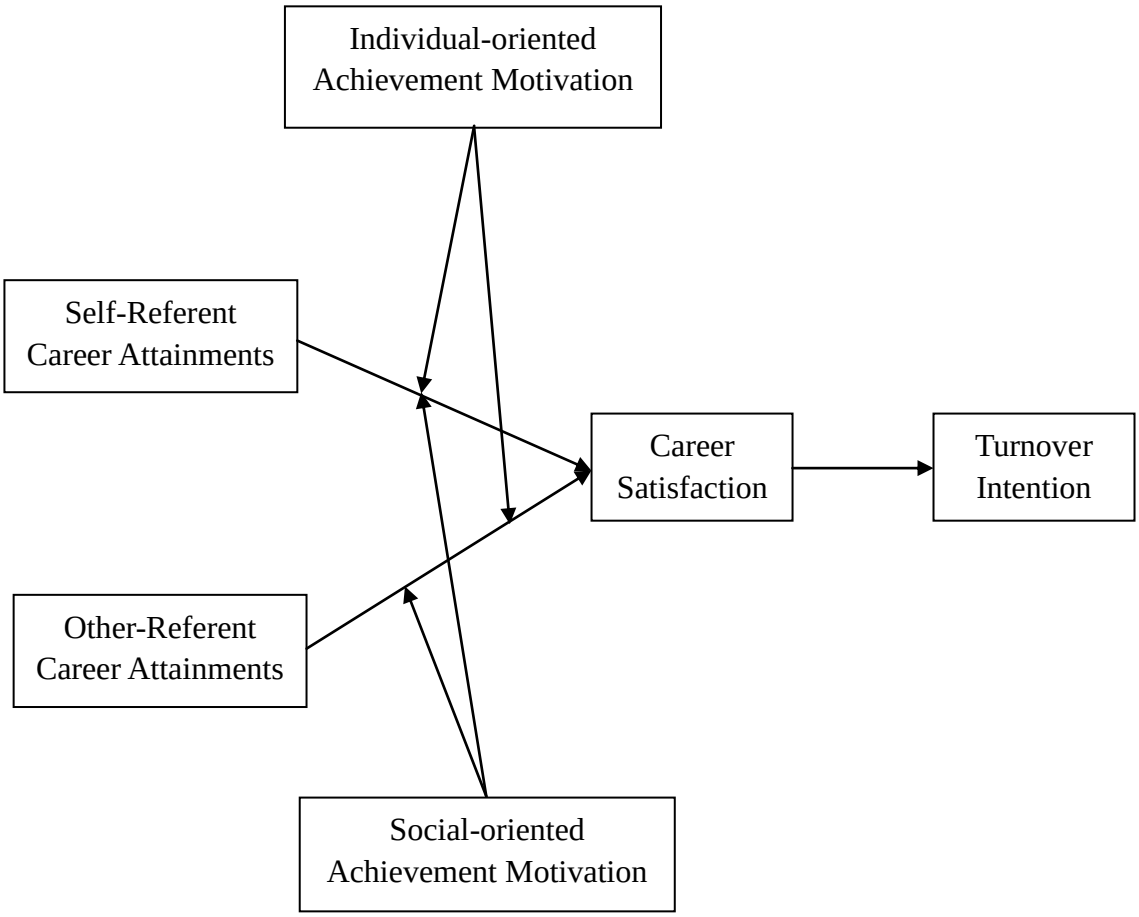
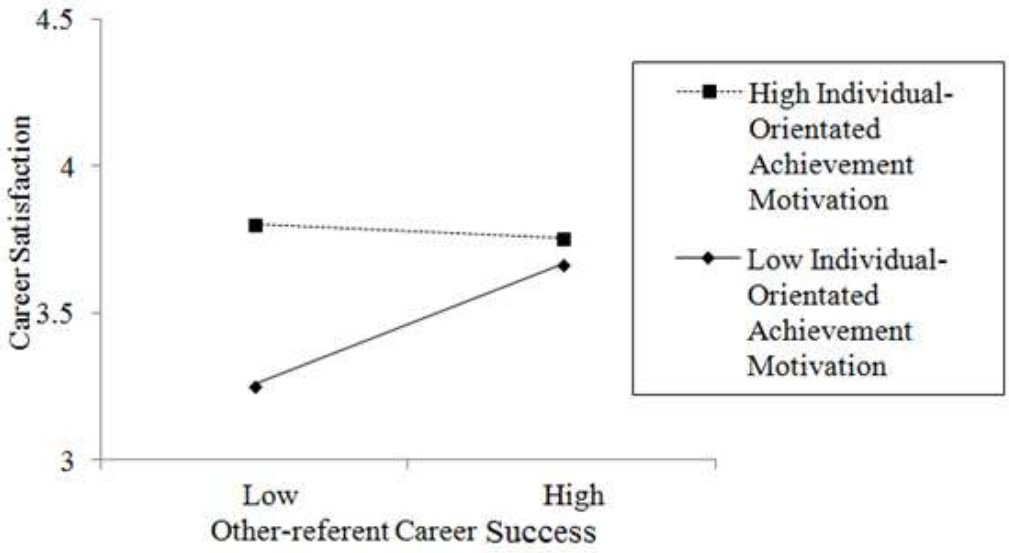
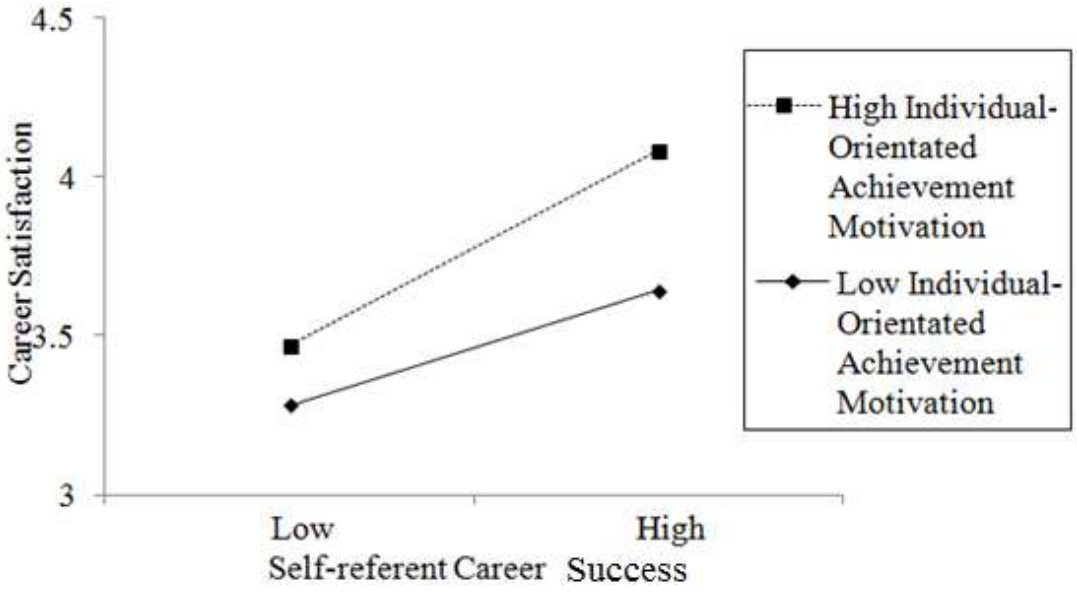


Figure 2. Interaction between Other-referent Career success and IOAM on Career Satisfaction.



Note: Low other-referent career success and low individual-orientated achievement motivation are defined as at least one standard deviation below the mean; high other-referent career success and high individual-orientated achievement motivation are defined as at least one standard deviation above the mean. High numbers indicate greater career satisfaction.

Figure 3. Interaction between Self-referent Career Success and IOAM on Career Satisfaction.



Note: Low self-referent career success and low individual-orientated achievement motivation are defined as at least one standard deviation below the mean; high self-referent career success and high individual-orientated achievement motivation are defined as at least one standard deviation above the mean. High numbers indicate greater career satisfaction.